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(*Quercus* () () (*castaneifolia* C.A.Mey.)

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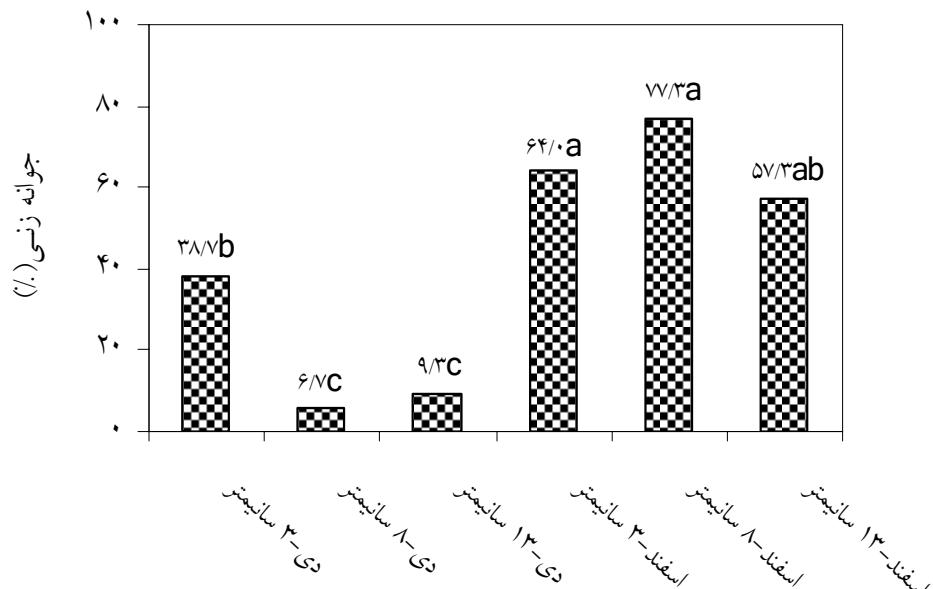
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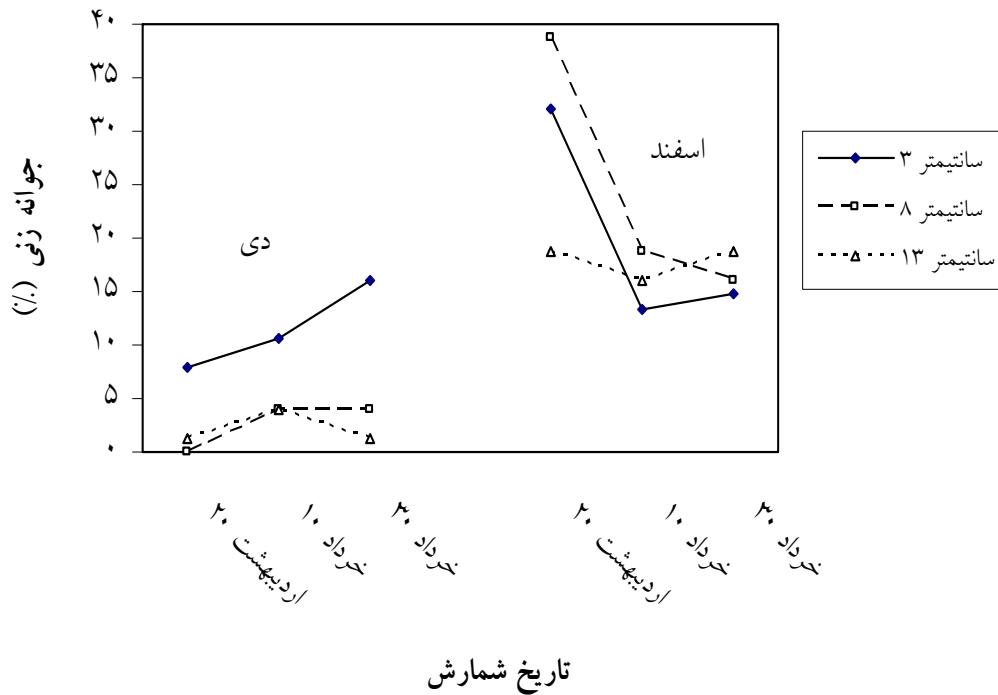
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castaneifolia

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- Q. arizonica Q. emori
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- Q. faleata pagoda Q. persica Q. infectoria
- Q. velutina
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Q. robur
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Q.
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velutina

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Q. douglasii
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Q. rotundifolia
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(*Fraxinus excelsior* L.)

(*Quercus castaneifolia*)

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Effect of Sowing Depth and Sowing Date on Seed Germination of *Quercus castaneifolia* (C.A.Mey.)

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Abstract

Influence of sowing depth (3, 8 and 13 cm) and sowing date (December and February) on germination rate of *Quercus castaneifolia* (C.A.Mey.) acorns was examined. The research was carried out on a sandy-loamy-clay soil in a non-regenerated open area of the plain forest of Noor Natural Resources and Marine Sciences Faculty (north of Iran). The experiment was as factorial trial and completely randomized design at three replications. The data analysis in mid-June revealed that the effect of sowing depth and sowing date and their interaction on germination rate was highly significant ($P = 0.000$). Irrespective of sowing depth, germination rate was greater in sowing date of February (66.2%) than December (18.2%) ($P = 0.000$). Irrespective of sowing date, germination rate was greater in sowing depth of 3 cm (51.3%) than 8 cm (42%) and 13 cm (33.3%). The best treatment combination was "February-8 cm" (77.3%), and "February-3 cm" (64%). Maximum seed germination (at 3 cm and 8 cm depths), sown in December and February occurred mostly in mid-June and late May, respectively. Generally, in each record date, germination rate in all sowing depths was higher in sowing date of February than December.

Key words: *Quercus castaneifolia*, (C.A.Mey.), Germination rate, Sowing date, Sowing depth